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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,056	08/27/2003	Arthur J. Epstein	OSU1159-059H	4936
8698	7590	03/24/2004	EXAMINER	
STANDLEY LAW GROUP LLP 495 METRO PLACE SOUTH SUITE 210 DUBLIN, OH 43017			YAMNITZKY, MARIE ROSE	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,056

Applicant(s)

EPSTEIN ET AL.

Examiner

Marie R. Yamnitzky

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The preliminary amendment filed August 27, 2003, which amends the specification and claims 7-9, and adds claims 11-16, has been entered.

Claims 1-16 are pending.

This application contains claims directed to the following patentably distinct species of the claimed invention: A light emitting polymeric material and light emitting device comprising the material wherein the material comprises

I) polymeric chains each having substituent moieties wherein the polymeric chains have a structure of the formula set forth in claim 2 wherein

Y is one of CH_2 , O, S, CO or NR_2 ,

A is one of $(\text{CH}_2)_n$, $(\text{CH}_2\text{CH}_2\text{O})_n$ or $(\text{CH}_2\text{CH}_2\text{O})_n\text{NR}$ where n is one of 0-6,

B is one of $(\text{CH}_2)_n$ where n is one of 0-6, aryl group having 6-14 carbon atoms or calixarene having 18-200 carbon atoms,

C is one of $(\text{CH}_2)_n$, $(\text{CH}_2\text{CH}_2\text{O})_n$ or $(\text{CH}_2\text{CH}_2\text{O})_n\text{NR}$ where n is one of 0-6,

u is one of 1-6,

w is one of 1-6, and

Z is a structure represented by one of the six formulae set forth in claim 2 wherein

Y is one of CH_2 , O, S, CO or NR_2 ,

B is one of $(\text{CH}_2)_n$ where n is one of 0-6, aryl group having 6-14 carbon atoms or calixarene having 18-200 carbon atoms,

u is one of 1-6, and

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w is one of 1-6; or

II) rotaxanes, each comprising a polymeric chain having at least one ring extending about the circumference of the chain

wherein the chain has a structure represented by one of the six formulae set forth in claim 12 wherein

Y is one of CH₂, O, S, CO or NR₂,

B is one of (CH₂)_n, aryl group having 6-14 carbon atoms or calixarene having 18-200 carbon atoms,

u is one of 1-6, and

w is one of 1-6,

or the chain has a structure represented by the first formula set forth in claim 13 wherein

each of R₁, R₂ and R₃ is independently one of hydrogen, alkyl group, alkoxy group, aromatic group or N(R)₂,

or the chain has a structure represented by the second formula set forth in claim 13 wherein

each of R₁ and R₂ is independently one of hydrogen, alkyl group, alkoxy group, aromatic group, spirofluorene group or N(R)₂, and

each of R₃-R₈ is independently one of hydrogen, alkyl group, alkoxy group, aromatic group or N(R)₂,

or the chain has a structure represented by the third formula set forth in claim 13 wherein

each of R₁-R₆ is independently one of hydrogen, alkyl group, or alkoxy group,

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or the chain has a structure represented by the fourth formula set forth in claim 13,
or the chain has a structure represented by the fifth formula set forth in claim 13,
and wherein the ring about the chain is one of a cyclodextrin, a cyclophane, a ring
comprising the iridium chelate structure set forth in claim 14, a ring comprising the platinum-
containing structure set forth in claim 14, a ring comprising a pyridine group, or a ring
comprising a quinoline group.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. That is, applicant is required to elect I or II. If I is elected, applicant is required to make further elections with respect to each of the variables for the formula as defined in claim 2. If II is elected, applicant is required to make further elections with respect to the chain and the ring, including an election with respect to any variables contained in the selected chain and ring as set forth above. Applicant is also required to identify an ultimate species to be used as the starting point for search and examination purposes. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the

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limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

No telephone call was made to request an oral election to the above election of species requirement due to the complexity of the requirement.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The present application is identified in paragraph [0001] of the specification as a divisional application of prior application No. 08/901,888. A review of the present application versus the prior application shows that the present specification contains subject matter not explicitly disclosed in the '888 application as originally filed. Accordingly, the present application appears to be a continuation-in-part, rather than a divisional, of the '888 application.

Some of the present claims encompass subject matter not explicitly disclosed in the '888 application. For search and examination purposes, the examiner will consider subject matter not explicitly disclosed in the '888 application as having a filing date of August 27, 2003 unless applicant persuasively argues to the contrary. Subject matter of the present application that was not explicitly disclosed in the '888 application as originally filed is as follows:

the definition of "C" as set forth in paragraph [0010] and the corresponding claim limitation in claim 2,

the last two formulae set forth in paragraph [0012],

"rotaxanes" as used, for example, in paragraphs [0015], [0017], [0018], [0023] and claim 7,

paragraphs [0015] and [0017]-[0023] and the corresponding subject matter of claims 7-16.

With respect to the term "rotaxanes", the originally filed '888 application used the term "rotaxenes" and it is not clear that "rotaxenes" was merely a misspelling of "rotaxanes".

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Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for Art Unit 1774 is (703) 872-9306 for all official faxes.
(Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY
March 18, 2004



**MARIE YAMNITZKY
PRIMARY EXAMINER**

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